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ABSTRACT

The Personal Orientation Inventory (POI) was administered to 108 rural disadvantaged students entering the six-State regional Mountain-Plains program. Results indicate a low degree of self-actualization on all scales versus normal adults with no differences observed by sex and only one among States. Ethnic group differences are, however, observed on four scales. In light of Maslow's later conceptualizations, and the nature of the Mountain-Plains program, self-actualization per se does not appear relevant as a general in-program objective for direct attention in educational programs with disadvantaged young adults despite the highly significant differences observed. Rather, self-actualization is seen as relevant only as an ultimate objective for which only foundation work can be accomplished. (Author)

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SELF-ACTUALIZATION IN A RURAL DISADVANTAGED POPULATION: LEVEL OF DEVELOPMENT AND PROGRAM UTILITY

Counseling Services Report No. 12

Responding to:

"1. Personality Development Interpretation of Mountain-Plains Student Problems . . ."

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ABSTRACT

The POI was administered to 108 rural disadvantaged students entering the six state regional Mountain-Plains Program. Results indicate a low degree of self-actualization on all scales versus "normal" adults with no differences observed by sex and only one among states. Ethnic group differences are, however, observed on four scales. In light of Maslow's later (1970) conceptualizations, and the nature of the Mountain-Plains Program, "self-actualization" per se does not appear relevant as a general "in program" objective for direct attention in educational programs with disadvantaged young adults despite the highly significant differences observed. Rather, "self-actualization" is seen as relevant only as an ultimate objective for which only foundation work can be accomplished.

Introduction

The ability of certain scales of the Personal Orientation Inventory (POI) to distinguish Mountain-Plains students from a "normal" sample (but not so clearly between students and a clinical population) was the expected outcome of a study by Conrad (1974). However, the strength of the finding was unexpected and pointed to the ability of Maslow's (1953, 1970) "self-actualization" to at least partially explain the saliant characteristic(s) of the population (rural disadvantaged) under study. The current study examines the overall POI profile of this same sample internally by sex, state of origin, and minority status as well as versus normal and clinical populations for all POI scales in an attempt to answer the question: Is self-actualization a relevant goal for employability impact developmental programming with rural disadvantaged families?

It is expected that the tendency for Mountain-Plains students to resemble clinical population more closely than the normal sample will be observed across the entire profile.

No differences are expected by state of origin, or minority as the same selection criteria are applied in all states and equally to all ethnic groups. As the POI has previously proven insensitive to sex (Shostrum, 1966), and was previously reported as not differentiating between sexes in this population (Conrad, 1974), no sex differences are expected.

This paper is developed in four sections highlighting: 1) the sample, design, and procedure, 2) the instrument 3) the results, and 4) a discussion. An appendix reviewing the literature (Appendix 1), particularly as related to evaluating group educational experiences, is also included.

THE PERSONAL ORIENTATION INVENTORY (POI)

The POI was designed by Shostrom (1963) as a measure of positive mental health or "self-actualization." The POI consists of 150 two-choice, paired-opposite statements of values and behavior judgments. The items are first scored for the two basic scales of personal orientation: Inner-Directed and Time Competence. The inventory is then scored on ten subscales which measure important characteristics commonly associated with self-actualization.

Construct Validity. Recently, Maslow (1954, 1962) developed the idea of the self-actualizing person as one who is more fully functioning and lives a more enriched life than does the average person (Shostrom, 1966). Such an individual is seen as developing and utilizing all of his unique capabilities free of the inhibitions and emotional turmoil of those less self-actualized. Rogers (1951, 1961, 1969) reflected the same idea, and both of these authors suggested that such a person might be seen as the goal of the psychotherapeutic process and the educational process. The scales of the POI are also related to the research and theoretical formulations of Maslow's (1954, 1962) concept of self-actualization, Reisman's et al. (1950) system of inner-and other-directedness, and May's et al. (1958) and Perls' (1951) concept of time orientation.

The work of Ellis (1962) has suggested that psychotherapy can be viewed as a process of critically examining the irrational ideas and value orientations of the patient. As Buhler (1962, pp. 30-31) has suggested, value orientations are definite existential judgments. Following Kluckhohn, she states that these value orientations symbolize the fact that value and strictly cognitive elements are blended. A value orientation may be defined as a generalized and organized conception which influences behavior. Ellis (1962, p. 41) noted that much of what is called emotion is nothing more than a certain kind of biased, prejudiced, or strongly evaluative thought. Therefore, an affectively loaded idea about life may be properly defined as a value. Items in the POI were designed to reflect value orientations which are commonly held and which are considered to be significant to a person's approach to living.

Content Validity. Value items appear twice in the POI so that the particular continuum or extremes of the dichotomy are quite clear to the person taking the inventory. Items on the POI are stated both positively and negatively to further clarify the context of usage in the concept under consideration.

The items on the POI were chosen from significant, value judgment problems as seen by therapists at the Institute of Therapeutic Psychology over a five year period (Shostrom, 1966). Items were selected from the observed value judgments of clinically healthy and clincially troubled patients, though the criteria for neither of these categories was specified. Therapists were asked to describe the self-actualizing person with two or three adjectives. Shostrom listed the adjectives (1965, pp. 214-215), which included such items as rigid, frustrated, hostile, and non-committed for non-self-actualized persons and flexible, respon-

sible, warm, constructive, and non-defensive for self-actualized persons. As previously discussed, the scales and items were also based on the research and theoretical formulations of many writers in Humanistic, Existential, and Gestalt psychology.

POI Scales. The POI consists of two main scales; Time Ratio (23 items) and Support Ratio (127 items) comprise the basic scales of personal orientation. Time Competence (Tc) according to Shostrom (1966), measures the degree to which a person lives and focuses his life in the present. The self-actualized person appears to live more fully in the "here-and-now." He is able to tie the past and the future to the present in meaningful continuity. He appears to be less burdened by guilt, regrets, and resentments from the past and fears and fantasies about the future than is the non-self-actualized persons. His use of time in a competent way is expressed in a Time Ratio score of approximately 1:8.

Inner-Directed (I) is designed to measure how independent and self-supportive an individual is and whether his reactivity orientation is basically toward the self. The inner-directed person goes through life apparently independent, but still obeying an internal source of principles and motivations. This person is free, but his freedom is not gained by rebelling or pushing against others. For the validating groups the ratio between other-directedness, and inner-directedness is approximately 1:3.

The ten subscales are designed to measure the specific self-actualizing tendencies of an individual as described by Shostrom (1966). The Self-Actualizing Values (SAV) subscale consists of twenty-six items and measures the affirmation of the primary values held by self-actualizing people. The Existentiality (Ex) scale measures one's flexibility in applying such values or principles to one's life. It measures the ability of the individual to react in a situation without rigid adherence to principles and consists of thirty-two items. A high score on Feeling Reactivity (Fr) measures sensitivity to one's own needs and feelings and consists of twenty-three items. Spontaneity (S) contains eighteen items and indicates whether a person is fearful of expressing his feelings behaviorally. Self Regard (Sr) measures the ability to like one's self because of one's strength as a person. A low score on this sixteen item subscale indicates low self-esteem. Self Acceptance (Sa) indicates an acceptance of one's self in spite of one's weaknesses or deficiencies and consists of twenty-six items. Nature of Man (Nc) is designed to measure whether one sees man as essentially good. The individual can resolve the goodness-evil, masculine-feminine, spirituality-sensuality dichotomies in the nature of man (sixteen items). Synergy (Sy) is designed to measure the ability to see the opposites of life as meaningfully related and contains nine items. Acceptance of Aggression (A) is designed to show acceptance of feelings of anger or natural aggressiveness as opposed to defensive denial and repression of aggression. A high score on the twenty-five items indicates an ability to express anger. The Capacity for Intimate Contact (C) is designed to measure the ability to develop intimate, warm relationships with other human beings and consists of twenty-eight items. Intimate contact seems to include expressing feelings intensely to another person.

The Tc and I scales and all subscales are scored for the positive or self-actualized end of the continuums and correlations among the scales tend to be positive. Self-actualized groups are significantly higher on all scales and non-self-actualized groups tend to be lower on all scales (Shostrom, 1966). Normal groups tend to score in between. In the logical development of the scoring categories, the scales were not conceptualized as representing independent dimensions so that items may contribute to the measurement of more than one scale. The Tc and I scales are the only scales that do not have overlapping items. Inter-correlations among the POI scales are presented in Table 1.

Table 1

Intercorrelational Matrix[1] for Personal Orientation Inventory

POI		2	3	4	5	6	7	8	9	10	11	12
1. Time Competent	Tc	.49	.26	.31	.20	.38	.44	.43	.19	.29	.17	.25
2. Inner-Directed	I		.54	.70	.58	.71	.62	.63	.37	.41	.61	.55
3. Self-Actualizing Value	SAV			.21	.23	.45	.56	.03	.41	.58	.32	.15
4. Existentiality	Ex				.32	.42	.32	.57	.27	.36	.39	.48
5. Feeling Reactivity	Fr					.44	.25	.21	-.03	.12	.64	.53
6. Spontaneity	S						.44	.40	.17	.30	.47	.30
7. Self Regard	Sr							.21	.32	.26	.28	.23
8. Self Acceptance	Sa								.24	.22	.32	.30
9. Nature of Man	Nc									.53	-.04	-.02
10. Synergy	Sy										.28	.14
11. Acceptance of Aggression	A											.44
12. Capacity for Intimate Contact	C											

[1]Correlations are based on a college sample of 138 from a report by Knapp (1965).

In an investigation by Silverstein and Fisher (1968) of the factors measured by the POI, the factors were not found to be built into the test structure due to item overlap. The factors dealing with affective phenomena and intellectual/conceptual phenomena appear to be attributable to the relationships among the variables the test is designed to measure, and therefore clinically meaningful. A study by Tosi and Hoffman (1972) indicate the three major factors in the instrument account for 72% of the variance. Scoring and interpretation in terms of these factors might add power and validity to the instrument; although the N and sample included in the study argue for caution in interpreting the results. Knapp[2] argues that there are "clearly more than three or four order factors represented in POI item content," and that, "For comparative purposes... original scales as published are clearly preferable." A study by Knapp and Fitzgerald (updated) does not seem to demonstrate any distinct superiority for the "independent" scales.

Normative Data. Normative data for the POI is available for college students and for selected occupational and clinical groups. The POI Profile Sheet was constructed from adult norms that can be converted into standard scores with a mean of fifty and a standard deviation of ten. The college student scores are given in percentiles and were based on a sample of 2,607 entering college freshmen at Western and Midwestern liberal arts colleges. The relationship of standard scores and percentiles used in this analysis are established using the raw score (see Table 1, Shostrom, 1966).

To determine if the POI can significantly discriminate between self-actualized and non-self-actualized adults (Shostrom, 1946), the test was administered to clinically nominated groups of adults, twenty-nine and thirty-four respectively. The norms for average adults were based on a sample size of 160, but the Manual does not specify the criteria for selecting these subjects nor the circumstances under which they were used. Though the other two groups were nominated by members of the Los Angeles Society of Clinical Psychologists, the criteria for these selections were not clearly defined. Results of the study indicated that the test discriminates between self-actualized and the normal adult mean on eleven of the twelve scales. Based on these analyses, it appears the inventory discriminates between clinically judged self-actualized and non-self-actualized groups on eleven of twelve scales to the 0.05 level of confidence (Nc was the exception).

Reliability. Test-retest reliability coefficients have been obtained for POI scales based on a sample of forty-eight undergraduate college students when the test was administered twice with a one week interval (Klavetter and Mogar, 1967). Reliability coefficients for the subscales range from .55 to .85 as shown in Table 2.

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[2] Personal communication (9/6/73 and 12/22/73).

Table 2

Test-Retest Reliability Coefficients for Personal Orientation Inventory[3]

POI Scales		Test-Retest Reliability
Time Competent	Tc	.71
Inner-Directed	I	.84
Self-Actualizing Value	SAV	.74
Existentiality	Ex	.85
Feeling Reactivity	Fr	.69
Spontaneity	S	.81
Self Regard	Sr	.75
Self Acceptance	Sa	.80
Nature of Man	Nc	.66
Synergy	Sy	.72
Acceptance of Aggression	A	.55
Capacity for intimate contact	C	.75

[3]Reliability coefficients are based on a college sample of forty-eight from a report by Klavetter and Mogar (1967).

Reliability coefficients as high as .91 using test-retest methods were reported by Shostrom (1964) on 650 freshmen at Los Angeles State College, seventy-five members of a Sensitivity Training Program at the University of California in Los Angeles, and fifteen school psychologists in a group training program in Orange County.

Although POI profile patterns have been used to measure self-actualization, Damm (1969) was interested in which alternative methods might yield the best overall measure of self-actualization. Using 208 subjects, a raw score distribution was derived. The highest average of the coefficients between any scale or combination of scales and the other scales was obtained by combining the I and Tc scales (.97). The I scale alone was .93.

Sample, Design and Procedure

Subjects are young adult students of average intelligence[4] entering the Mountain-Plains open entry/open exit program during the summer and early fall of 1973. Testing was administered under standard conditions in the Counseling Center testing room during the orientation period.

The "design" is a static group comparison among 108 subjects (46 male, 62 female) and normal and clinical reference groups. Additionally, results are examined to ascertain the extent to which findings may apply to sexual, racial and geographic sub-groups. Analysis versus reference groups uses ANOVA tables reconstructed from means, N's and standard deviations with the Scheffe test for multiple comparisons. Sub-group analysis is accomplished with original data also using the ANOVA with the Scheffe test for multiple comparisons. Omega squareds, where reported, are calculated according to Hays (1963, p. 382). Theoretically, the current sample is representative of all Mountain-Plains students; although reservations in this area have been expressed (Conrad, 1974).

[4]Subjects have an average GATB G score of 103 and age of 27.

RESULTS

Versus Comparisons:

Subjects score significantly below the "normal adult" group on all POI scales (Table 3). Scores are in no case below those of the "clinical" group, but on the Tc, Sr, Nc, and C scales were insignificantly higher. The respective omega squares (0.27, 0.05, 0.20, 0.15. and 0.16) indicate a greater than "statistical" significance for all these scales except, perhaps, the Sr. Four of these differences (all but Sa) were previously reported and interpreted (Conrad, 1974).

TABLE 3 MOUNTAIN-PLAINS STUDENTS VS NORMAL AND CLINICAL GROUPS ON POI SCALES

Scale	(1) Mountain-Plains Students		(2) Hospitalized Psych. Patients		(3) Normal Adults		F Among Groups	F 1 vs 2	F 1 vs 3	W^2
	Mean	S.D.	Mean	S.D.	Mean	S.D.				
Tc	14.3	3.16	13.4	3.4	17.7	2.8	84.60**	2.79	37.50**	.27
I	75.8	9.18	69.0	11.4	87.2	13.6	103.00**	17.50**	49.10**	.31
Sav	18.55	2.84	17.3	3.2	20.2	3.0	38.60**	5.73**	9.40**	.15
Ex	17.64	4.38	15.2	4.6	21.8	5.1	140.00**	15.30**	41.70**	.38
Fr	13.75	2.76	12.7	3.1	15.7	3.3	40.50**	3.93*	12.70**	.15
S	10.59	2.41	8.9	2.6	11.6	3.0	43.60**	13.30**	4.47*	.16
Sr	11.11	2.26	10.5	3.1	12.0	2.7	12.50**	1.59	3.29*	.05
Sa	14.14	3.09	13.1	3.3	17.1	4.0	57.30**	2.98	22.70**	.20
Nc	10.64	1.93	10.6	2.2	12.4	1.9	39.50**	.01	24.00**	.15
Sy	6.12	1.33	5.7	1.5	7.3	1.2	61.20**	3.25*	24.10**	.21
A	14.75	2.77	13.3	3.1	16.6	3.7	43.90**	6.78**	10.40**	.16
C	15.47	3.28	14.7	4.1	18.8	4.6	45.40**	1.20	11.70**	.16

*Significant, $p \leq 0.05$
**Significant, $p \leq 0.01$

Reference Group (2) -- Hospitalized Psychiatric Patients, n=185. Source: POI Manual, p.26.

Reference Group (3) -- Normal Adults, n=158. Source: POI Manual, p.26.

Sex:

There is no significant POI score differences on any scale between male and female subjects (Table 4).

TABLE 4 POI BY SEX

Group 1 = Male
Group 2 = Female

VARIABLE	GROUP	MEAN	S.D.	F
Tc	1	14.00	2.85	0.55
	2	14.45	3.33	
I	1	74.48	9.31	0.14
	2	73.79	9.68	
Sav	1	18.13	3.07	0.04
	2	18.02	3.03	
Ex	1	17.20	4.03	0.33
	2	16.71	4.53	
Fr	1	13.54	2.83	0.67
	2	13.98	2.70	
S	1	10.59	2.57	1.16
	2	10.05	2.56	
Sr	1	11.13	2.27	1.33
	2	10.56	2.70	
Sa	1	13.35	3.16	2.48
	2	14.35	3.37	
Nc	1	10.33	1.73	0.18
	2	10.50	2.33	
Sy	1	5.74	1.51	2.80
	2	6.18	1.21	
A	1	14.89	2.78	1.88
	2	14.13	2.91	
C	1	15.24	3.42	0.13
	2	15.00	3.32	

ANOVA Summary Tables Available upon request
No significant difference $p \leq 0.05$

Ethnic Background:

Majority subjects appear as significantly more flexible in application of values (Ex) and more self-acceptant (Sa) than Indian students (Table 5). A "two-group-only" anlysis shows majority subjects to be significantly more inner-directed (I) and have a higher capacity for intimate contact (C) than Indian subjects; although the unequal N's indicate need for a very cautious interpretation.[5]

[5]The W^2 for each (I and C) two-group-only analysis is 0.05. This does not indicate a particularly significant result.

TABLE 5 POI BY MINORITY

Group 1 = Caucasian Majority, n=81.
Group 2 = Indian, n=19.
Group 3 = Chicano, n=5.
Group 4 = Other (Black, etc.), n=3.

VARIABLE	GROUP	MEAN	S.D.	F	Schaffe' Groupwise Comparisons
1 - Tc	1	14.63	3.18	1 vs 2 only 6.00*	
	2	13.32	2.83		
	3	12.20	2.68		
	4	13.67	2.89	1.75	
2 - I	1	75.21	9.68		
	2	69.32	8.23		
	3	75.20	3.96		
	4	72.00	12.29	2.12	
3 - Sav	1	18.19	3.23		
	2	17.26	2.58		
	3	18.80	1.30		
	4	18.67	2.08	0.62	
4 - Ex	1	17.65	4.34		1 vs 2
	2	13.89	3.11		
	3	15.80	4.55		
	4	18.00	0.00	4.48**	F=4.28**
5 - Fr	1	13.93	2.81		
	2	13.95	2.25		
	3	11.20	1.64		
	4	13.67	4.51	1.59	
6 - S	1	10.26	2.76		
	2	9.89	1.94		
	3	11.60	1.34		
	4	11.00	1.73	0.66	
7 - Sr	1	10.79	2.54		
	2	10.89	2.45		
	3	11.60	1.52		
	4	9.33	4.51	0.50	
8 - Sa	1	14.41	3.27		1 vs 2
	2	12.05	3.17		
	3	14.20	2.17		
	4	12.33	3.51	3.00*	F=2.74*
9 - Nc	1	10.35	2.06		
	2	10.47	2.34		
	3	12.00	1.41		
	4	9.67	1.53	1.13	
10 - Sy	1	6.04	1.44		
	2	5.79	0.98		
	3	6.20	1.30		
	4	5.67	1.53	0.26	
11 - A	1	14.59	2.94		
	2	14.05	2.61		
	3	14.00	2.00		
	4	14.00	4.58	0.25	
12 - C	1	15.53	3.37	1 vs 2 only 6.15*	
	2	13.42	3.19		
	3	13.60	1.95		
	4	16.67	2.08	2.72*	

*Significant, $p \leq 0.05$ **Significant, $p \leq 0.01$

Because of grossly unequal n's and small size of "non groups," 3 and 4, statistical interpretation is not valid/valuable in this comparison, except perhaps the group 1 vs group 2 result on Ex and Sa. Summary tables available on request.

Geographic Origin:

There is a significant among States difference on test scores only on Ex, flexibility in application of values (Table 6). The Scheffe Test shows no significant groupwise differences; although by implication the highest score (Idaho and Wyoming have a tie for highest score) may be assumed to be higher than the lowest (Montana).

A rank ordering of Ex scores does predict a marked break observed between the top four (Idaho, North Dakota, South Dakota and Wyoming) and bottom two (Montana, and Nebraska) States on the variable "completer/non-completer ratio by state" as reported by Coyle, et.al. (1973).

TABLE 6 POI BY STATE

Group 1 = Idaho, n=19
Group 2 = Montana, n=15
Group 3 = South Dakota, n=21
Group 4 = North Dakota, n=23
Group 5 = Wyoming, n=22
Group 6 = Nebraska, n=8

VARIABLE	GROUP	MEAN	S.D.	F
Tc	1	13.63	3.08	0.88
	2	13.73	2.94	
	3	14.62	3.58	
	4	13.83	2.52	
	5	15.32	3.06	
	6	14.13	4.12	
I	1	77.16	10.10	0.96
	2	71.00	7.32	
	3	75.14	9.39	
	4	73.09	9.38	
	5	74.55	10.71	
	6	71.38	8.48	
Sav	1	19.53	2.95	1.83
	2	18.67	2.90	
	3	18.05	2.60	
	4	17.43	3.26	
	5	17.68	3.01	
	6	16.38	3.16	
Ex	1	18.32	5.71	2.55*
	2	14.07	3.01	
	3	16.38	3.17	
	4	17.17	4.21	
	5	18.32	4.26	
	6	15.75	3.45	
Fr	1	13.11	2.96	0.45
	2	14.47	2.42	
	3	13.76	3.51	
	4	13.87	2.22	
	5	14.00	2.83	
	6	13.50	2.14	
S	1	11.26	2.16	1.45
	2	10.27	2.28	
	3	10.00	2.85	
	4	10.61	2.15	
	5	9.95	3.17	
	6	8.63	2.00	
Sr	1	11.16	2.46	1.72
	2	11.00	1.77	
	3	11.48	2.02	
	4	10.17	2.96	
	5	11.09	2.20	
	6	8.88	3.80	
Sa	1	14.00	3.28	1.75
	2	12.33	3.37	
	3	13.76	2.93	
	4	13.43	3.10	
	5	15.32	3.41	
	6	14.75	3.73	

(continued)

TABLE 6 (continued)

VARIABLE	GROUP	MEAN	S.D.	F
Nc	1	11.00	1.76	2.01
	2	10.80	1.70	
	3	10.95	2.04	
	4	10.26	2.28	
	5	9.32	2.10	
	6	10.50	2.33	
Sy	1	6.63	1.26	2.06
	2	6.40	1.06	
	3	5.81	1.36	
	4	5.65	1.61	
	5	5.95	1.29	
	6	5.25	0.89	
A	1	14.95	3.27	0.48
	2	13.93	3.17	
	3	14.76	2.83	
	4	14.13	2.44	
	5	14.73	3.19	
	6	13.63	1.69	
C	1	15.32	3.71	0.90
	2	14.47	2.90	
	3	14.52	3.25	
	4	15.30	3.48	
	5	16.14	3.45	
	6	13.88	2.80	

*Significant, $p \leq 0.05$

Discussion -

Sex:

As sex differences are not significant, findings can be assumed to apply equally to men and women. This is consistent with previous results indicating the POI not to be particularly sex sensitive (Shostrum, 1966, p. 8).

Ethic Background:

Although Indian students differ from majority culture subjects on four scales, comparison of the group 1 means from Table 5 with the overall means in Table 3 indicates that differences vs comparisons are similarly large for majority and minority groups (i.e., the overall significance is not due to ethnic group effects). Conclusions appear to hold across ethnic groups only perhaps "more so" on some scales for Indian students. The "N" for other minority groups is too low for interpretation or comparison.

As the completion ratio for Indian families is 1/3 vs 1/2 for all students,[6] the indicated trait differences (flexibility in applying values, self acceptance, inner directedness, and capacity for intimate contact) might be a profitable focus for early program attention and perhaps even for pre-program selection.[7]

Geographic Origin:

The only significant difference among States is found on the Ex scale and would at first appear to be more "statistical" than real. To test the power of the scale, states were ranked by Ex score in an attempt to reproduce rather clear differences in completion rate among states. While the exact rank ordering was not reproducible, States were correctly identified as belonging to either the four highest or two lowest success rate groups. (There is a marked difference between the success rates of the top four and bottom two states). This could indicate the Ex scale as one key to predicting success; although further work is required before this can be said with certainty.

The lack of significant among States differences on 11 of the twelve scales, particularly the two majors (Tc and I), indicates considerable homogeneity of selection by state as regards variables under study with the possible exception being

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[6]Source: Indian completion data specific from Doug Meyers, Mountain-Plains Research Services Department, January, 1974. Overall completion data is from a report by Coyle, et.al., (1973).

[7]Drinking, isolation, loneliness, pressures from the extended family, marital problems and general environmental adjustment are major problems emerging during discussions by the Mountain-Plains Task Force on Indian Family Retention. It emerges too strongly for mere coincidence that these problems are interpretable in terms of these four traits (e.g. Ex: Isolation and general adjustment. Sa: Drinking. I: Extended family pressures. C: Isolation and marital problems).

the higher "rigidity" of students selected from Montana and/or Nebraska (although this could as well be interpreted as a product of general state population differences or an artifact of the small N's for these states -- particularly the latter in light of the N of eight for Nebraska). However, as with the minority differences, the trends in Table 3 hold for the most favorably scoring state. Trends in results and interpretations can thus be applied to students from each of the six states.

Comparison Groups:

The predicted lower scores on all scales vs normal adults classify the subject population not only as "non-self actualized", but "sub-normal" on all the aspects of "positive mental health" surveyed.[8] The trend to resemble hospitalized psychiatric patients previously observed again emerges within no significant difference between subjects and this group on five of the twelve scales; including time competence. While the implication of low psychological functioning is unpleasant, it was expected. The implication of a possibility for a large degree of actual disfunctioning was not expected, and is disturbing.[9]

Overall:

First interpretations would yield strong support for an overall "diagnosis" of population problems as "non-self-actualized" and imply that remedial/developmental action should have self/actualization, per.se. as a current goal since both major POI scales (Tc and I) have relatively high omega squares (.27 and .31), overall profile scores are low, and at least one key scale (Ex) shows indication of predictive strength as regards program success. However, Maslow (1970, p. xx and Ch. 11) states that self-actualization is not applicable to "younger" people. Rather he indicates that trait development (reminiscent of Erickson's (1963) ego qualities) is a necessary pre-cursor to self-actualization. Re-thinking in light of this view, it would appear that self-actualization per se offers no proactive panacea to treating problems in the group under study. Rather it would seem that elements of self-actualization (ego traits or qualities if you will) are in need of focused attention/development merely to attain more adaptive current functioning and as a pre-cursor to higher order "self-actualizing" development.

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[8]As the POI Manual reports, "self-actualized" persons scoring significantly higher than "normal adults", results of comparison to a "self-actualized" population should yield even greater differences.

[9]"Clinical" interpretations of individual 16PF profiles in the student group support the implication of high neuroticism for the group.

Current adaptive improvements and foundation laying fits well into the overall developmental perspective of the Mountain-Plains program. In no area is the "ultimate" development attainable in program. Rather the program is essentially an intervention to set directions and lay foundations; although a sense of the "ultimate" is necessary to guide foundation efforts.[10] In this vein "positive mental health" or "self-actualization" is valuable in order to provide direction to both staff and students as they go about the process of charting new directions for careers and lives and laying the essential foundations from which these may be launched.

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[10]Maslow (1970, p. xiv) argues that a major mistake is made in the motivational area as regards his hierarchy in that motivators tend to focus on levels one and two whereas he finds most persons ("motivatees") to be functioning at higher motivational levels. This contention is supported by State job developers who report completing students enroute to job interviews tend to focus on salaries, fringe benefits, etc., (security) but when picking the actual position talk almost entirely about satisfaction. Lack of attention to higher motivational levels and focus upon security motivators is also seen by some as a major problem in execution of the overall Mountain-Plains program.

Appendix I

REVIEW OF THE LITERATURE: POI

Though self-report inventories are frequently used to evaluate the outcomes or effectiveness of various group experiences, Anastasi (1968, p.464) suggested that this type of test needs to be strengthened by combining a personality theory framework, good content validity, and additional checking on criterion correlations and factor loading. An investigation of the correlations between the items and scores on the POI and other external criteria is important in determining its usefulness in this research setting.

Concurrent Validity. The first studies on the POI were designed to investigate its sensitivity in clinical settings, as the one reported by Shostrom and Knapp (1966). In this instance, the POI was administered to two groups of outpatients in therapy, a group of thirty-seven beginning patients entering therapy and a sample of thirty-nine patients in advanced stages of therapy. An analysis of the POI scores showed that all twelve scales differentiated between the criterion groups at the 0.01 level of significance.

In another clinical study reported by Fox, Knapp, and Michael (1968), 185 male and female patients under treatment in a psychiatric hospital were given the POI along with other psychological tests. The hospitalized sample was lower than the non-self-actualized norm on all scales with the exception of the scale that measures self worth. Differences between non-self-actualized and hospitalized samples were significant in seven out of twelve scales at the 0.05 confidence level.

Fisher has used the POI in two studies to measure psychopathic felons admitted to a California correctional institution. In the first study (1968), 150 male felons scored lower on nine of twelve scales than the normal population but higher on all scales than did a psychiatric group (Knapp, 1965). In the second study (Fisher and Silverstein, 1969), felons were found to possess a distorted view of the normative degree of self-actualization in the culture and their relationship to that norm.

In further studies, the POI was found to discriminate not only between neurotic and normal populations but also between average and self-actualized persons in a relatively normal sample. In two separate studies Foulds (1969a and 1969b) used the POI to measure effectiveness in counseling. In the first study (1969a), the POI was used to discriminate between the two groups of counselors with respect to their ability to communicate a facilitative genuineness within the counseling relationship. Thirty graduate students in counseling were administered a scale to determine the top and bottom eight students. When results were compared with the POI scores, it was disclosed that seven of the twelve scales significantly differentiated between "high genuineness" and "low genuineness" groups. In the second study, Foulds (1969b) used the POI and judges' estimates of thirty beginning practicum students' sample tapes to correlate the ability to communicate facilitative conditions during counseling and personality characteristics associated with self-actualization. "Empathetic understanding in interpersonal processes" correlated significantly with six of the twelve POI scales. "Facilitative genuineness in interpersonal processes" was signficantly related to ten of the twelve POI scales.

A study of thirty counselors attending a National Defense Education Act Guidance Institute, reported by McClain (1970), further demonstrated that the POI can measure self-actualization among normal adults. The ratings for self-actualization by three staff members (practicum supervisor, group process leader, and a clinical psychologist), were compared with individual scores on the POI. Although the most significant correlation ($p>0.01$) was on inner-directedness, significance to the 0.05 level was found on nine of the twelve scales.

The criterion-related validity of the POI was checked by Graff (1970) in an examination of the relationship between the POI and dormitory assistant effectiveness as evaluated by students. The findings suggested that the factors of inner-directedness, spontaneity, and acceptance of aggression as indicated by the POI, were the significant predictors of success for dormitory assistants in their diverse roles when POI scores were compared with student ratings.

The POI was used in a study by Hekmat and Theiss (1971) to measure the relative influence of social conditioning on affective self-disclosures on a group of high self-actualizers and low self-actualizers as indicated by the POI. The self-actualized group was least susceptible to therapeutic conditioning through reflection.

Correlations with other Scales. The POI was developed as an aid for assessing a patient's more positive mental health attributes and for evaluating progress in therapy. Shostrom (1966) suggested that where other diagnostic instruments were developed from mentally disturbed populations and provide a negative approach to the therapeutic process, the POI provides an objective delineation of the client's mental health and a positive approach to the therapeutic process

Shostrom's assumption, then, was that as therapy progresses, health increases and pathology decreases. To test this (Shostrom and Knapp, 1966), a group of thrity-seven patients in beginning therapy and thirty-nine patients in the advanced stages of therapy, were administered the POI and the Minnesota Multiphasic Personality Inventory (MMPI). All twelve POI scales differentiated between the two groups; on the MMPI, seven of the ten clinical scales differentiated between groups at the 0.05 level of confidence. While the correlations of the POI scales with certain of the MMPI scales were generally consistent in the direction expected, it was apparent that the two instruments are not measuring exactly the same aspects of mental health.

To measure the relationship between self-actualization and neuroticism, the Eysenck Personality Inventory (EPI) and the POI were administered to 136 undergraduate college students in a study by Knapp (1965). On the basis of the EPI scores, students were divided into high and low neuroticism groups and their scores correlated with the POI. Differences on all scales were significant at the 0.05 level of confidence. When compared to the standardized norms, the high neurotics scored below the level of the non-self-actualizing mean on ten of twelve scales. The low neurotics scored below the normal population mean on nine of twelve scales.

In a study reported by LeMay (1969) of 194 male and female freshmen at Oregon State University, sex differences were found in the needs that accompany self-actualization when correlating the POI with the Edwards Personal Preference Schedule. A comparison between the POI and the Gordon Personal Inventory in a study by Braun and Asta (1968) found nine significant correlations. The

Original Thinking scale of the the Gordon Personal Inventory showed the most consistent tendency to relate to the dimensions measured by the POI.

The POI was used in a study by Foulds and Warehine (1971) to determine the relationship between self-actualization and the Repression-Sensitization scores, suggesting that repressors may be better adjusted than sensitizers. The hypotheses that self-actualized persons would be more accurate perceptually, demonstrate superior reasoning ability, and prefer ambiguous stimuli was not supported when the POI was correlated with abbreviated versions of the Seashore Measures of Musical Talent, the Watson-Glaser Critical Thinking Appraisal, and the Barron-Welsh Art Scale as reported by Braun (1966).

Studies using the POI. Though the POI is a relatively new test and research is somewhat limited, the POI was selected as the instrument for this study because several investigations had successfully used the POI to measure personal growth in educational settings and group situations. The POI measured change in the self-actualization of under-achieving college students after nine weeks of special lectures or group discussion as per a report by Leib and Snyder (1967). Young and Jacobson (1970) noted change toward positive self-actualization after a fifteen hour marathon group experience using test and retest scores on the POI. Although the experimental subjects showed an increase in their ability to react without rigid adherence to principles and to affirm the values related to self-actualization, the scores did not statistically differentiate them from the control group on the other scales. Guinan and Foulds (1970) found more significant changes after a weekend marathon group experience using test and retest scores on the POI. Although all twelve means scores changed in a positive direction, the experimental

means scores changed significantly on seven scales while none of the means scores for the control group changed significantly.

Culbert, Clark, and Bobele (1968) reported an increase on all twelve POI scales after a group of university students participated in thirteen weeks of sensitivity training. The pretest means were comparable to the norms established for a normal adult population, and the post test scores showed scores within the range of a comparison population of self-actualizers. Four scales produced significant statistical increase. In the study it was found that the POI does not correlate with the Problem Expression Scale, which could suggest that in such groups, values change before behavior.

Gibb (1968) used the POI for a cross-sectional study of 250 students to identify variables related to self-actualization. Using questionnaires on home background, positive correlations between certain scales were related to father's education, mothers who work, and families with little or no formal religious training. Stewart (1968) found no significant correlation between personal factors and academic performance using the POI, grade point averages, and the Cooperative School and College Aptitude Tests in a study of thirty-one students.*

Faking on the POI. Self-report personality inventories are especially subject to faking as one answer is usually recognized as more socially desirable than the other (Anastasi, 1968, p. 456). Where the evaluation of the experimental groups depends solely on the POI scores, the question of test transparency seems

*Various studies have also shown no correlation between GPA and subsequent life/career success. (Insufficient data exits on correlation of POI scales and "success" to warrent comment.)

particularly relevant. Braun (1966 and 1969) reported two studies that relate to this question. Students in a social psychology class were asked to answer POI items as a typical neurotic would and then immediately afterwards as the same sypothetical person after two years of therapy (1966). The difference between the two sets of scores were significant to the .001 confidence level on all scales. Since the fifteen students were able to manipulate their test scores so readily, Braun suggested this might indicate that the POI is somewhat transparent and should be used with caution where persons might want to make a good impression.

In a later study Braun and LaFaro (1969) instructed six groups of psychology students in order to demonstrate the fakability of self-report inventories. After taking the POI using standard instructions during classroom meetings, four groups were asked to take the test deliberately trying to make a good impression or answer as a self-actualized person would. Two other groups were given special lectures on the concept of self-actualization and then were asked to fake the test. The first four groups' scores were consistently less favorable faking than under standard instructions in forty-five or forty-eight comparisons, twenty-three of which were significant at the 0.05 level. The two additional groups with specific knowledge about self-report inventories and existential psychology were able to achieve more favorable scores on the faked test in twenty-two of twenty-four comparisons, eleven of which were significant at the 0.05 level of confidence. Braun concluded that the inventory shows an unexpected resistance to faking, especially among self-report inventories.

The two major elements in faking are "social desirability need" and "item transparency." As; 1) the Mountain-Plains population is without exception unaware of the elements of self-actualization, and 2) no selection variable is involved and the testing situation is thoroughly explained, it is reasonable to assume that "faking" problems will be minimal in the current situation.

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